







Wind Power

Our partners bring extensive experience in wind energy, offering advanced and reliable wind power solutions tailored to meet diverse energy needs.

Solar Power

To support the transition to sustainable energy, our partners provide customized solar power solutions, leveraging cutting-edge technology to deliver optimal performance and efficiency for various applications.

■ Wind & Solar Hybrid System

Combining the strengths of wind and solar, our partners design and implement hybrid systems that are adaptable to both gridtied and off-grid configurations, ensuring continuous and reliable power generation.

Storage

Recognizing the intermittent nature of renewable energy sources, our partners develop innovative storage solutions to ensure a consistent energy supply, utilizing advanced technologies to store excess energy efficiently.

Our collaboration with industry-leading partners ensures that GENerations Ltd benefits from patented technologies and certified systems, guaranteeing quality and reliability in all our renewable energy projects.

GENERATIONS
ENERGY





CONTENTS

- 1 Introduction of vertical fans
- **1** Introduction of horizontal fans
- 3 Off grid and on grid controller
- 4 Related real shot case display



VERTICAL AXIS
WIND TURBINE
Utilizing the power of nature with science and technology

GENERATIONS ENERGY













Vertical Wind Turbine

Overload protection



Grace

- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
- Muti colors for options

Flexible

- Wide power and voltage range
 Workable to do hybrid with solar panel
 Compatible with lead-acid or lithium-ion batteries

Reliable

- High efficiency on low wind speed with 2.5m/s
 Suitable for all applications
 Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
- Coreless PMG with low rpm
- Curved blades decrease wind resistance

Application Scenario







Communication base station



Farm



RV



Yacht



Street lamp, monitoring





| ltem | Х3 | X5 | X8 | Х9 | |
|------------------------------|------------|---------------|---------------|------------|--|
| Started wind speed (m/s) | 1.3 m/s | 1.3 m/s | 1.3 m/s | 1.3 m/s | |
| Cut-in wind speed (m/s) | 2.5 m/s | 2.5 m/s | 2.5 m/s | 2.5 m/s | |
| Rated Wind speed (m/s) | 12 m/s | 12 m/s | 12 m/s | 12 m/s | |
| Rated voltage(AC) | 12V-24V | 12V-24V | 12V-48V | 12V-48V | |
| Rated power(W) | 200W | 400W | 1500W | 2000W | |
| Max power(W) | 210W | 410W | 1510W | 2010W | |
| Rotor Diameter of Blades(m) | 0.38m | 0.48m | 0.92m | 1.1m | |
| Product assembly weight (Kg) | <22Kg | <35Kg | <50Kg | <85Kg | |
| Blades height(m) | 75cm | 90cm | 1.32m | 1.64m | |
| Safe wind speed (m/s) | ≤40m/s | | | | |
| Blades quantity | | : | 3 | | |
| Blade material | | Nylon | /Glass | | |
| Generator | Three phas | e permanent r | nagnet suspen | sion motor | |
| Control System | | Electro | magnet | | |
| Mount Height(m) | | 7~12r | n (9m) | | |
| Generator protection grade | | IP | 54 | | |
| Work environment temperature | | -25~ | -45ºC | | |
| Work environment humidity | | ≤9 | 0% | | |
| Altitude: | | ≤45 | 00m | | |
| Overspeed protection | | Electromag | netic brake | | |
| 22 (22) | | | | | |

Electromagnetic brake and the unloading unit









- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
 Muti colors for options

Flexible

- Wide power and voltage range
 Workable to do hybrid with solar panel
 Compatible with lead-acid or lithium-ion batteries

Reliable

- High efficiency on low wind speed with 2.5m/s
- Suitable for all applications
- Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
 - Coreless PMG with low rpm
- Curved blades decrease wind resistance

Application Scenario















Farm base station

Street lamp, monitoring

Yacht







| | terral second | | 200000000 | | | | | |
|---------------------------------|---------------|----------|-----------|----------------|----------------|-----------|----------|----------|
| Item | FX-600 | FX-800 | FX-1K | FX-2K | FX-3K | FX-5K | FX-10K | FX-15K |
| Started wind speed (m/s) | 1.3 m/s | 1.3 m/s | 2 m/s | 2 m/s | 2 m/s | 2 m/s | 2 m/s | 2 m/s |
| Cut-in wind speed (m/s) | 2.5 m/s | 2.5 m/s | 3 m/s | 3 m/s | 3 m/s | 3 m/s | 3 m/s | 3 m/s |
| Rated Wind speed (m/s) | 10 m/s | 10 m/s | 10 m/s | 10 m/s | 12 m/s | 12 m/s | 12 m/s | 12 m/s |
| Rated voltage(AC) | 12V-48V | 12V-48V | 24V/48V | 24V-96V | 48V-220V | 48V-220V | 48V-220V | 48V-220V |
| Rated power(W) | 600W | 800W | 1000W | 2000W | 3000W | 5000W | 10KW | 15KW |
| Max power(W) | 650W | 850W | 1550W | 2500W | 3500W | 6000W | 12KW | 17KW |
| Rotor Diameter of Blades(m) | 0.6m | 0.8m | 1.1m | 1.6m | 1.92m | 2m | 2,4m | 3m |
| Product assembly weight (Kg) | <26Kg | <27Kg | <45KG | <70KG | <152KG | <170KG | <225KG | <260KG |
| Blades colors | White/G | reen/Red | White | White | White | White | White | White |
| Blades height(m) | 1.0m | 1.32m | 1.64m | 1.92m | 2.8m | 3.0m | 3.6m | 5m |
| Safe wind speed (m/s) | | | | ≤40n | n/s | | | |
| Blades quantity | | | | 3 | | | | |
| Blade material | | | | Glass | Fiber | | | |
| Generator | | | | 3 | | | | |
| Control System | | | | Electron | nagnet | | | |
| Mount Height(m) | | | | 2~12 | 2m | | | |
| Generator protection grade | | | | IP5 | 4 | | | |
| Work environment temperature | | | | -25~+ | 459C | | | |
| Work environment humidity | | | | ≤90 | % | | | |
| Altitude | | | | ≤450 | 0m | | | |
| Overspeed protection | | | | Electromagn | netic brake | | | |
| Overload protection | | | Electroma | gnetic brake a | and the unload | ling unit | | |
| | | | | | | | | |

Vertical Wind Turbine









Grace

- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
- Muti colors for options

Flexible

- Wide power and voltage range
 Workable to do hybrid with solar panel

Reliable

- High efficiency on low wind speed with 2.5m/s
 Suitable for all applications
 Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
- Coreless PMG with low rpm

Application Scenario



Household









Farm

RV



Yacht

Street lamp, monitoring





| ltem | FS-200 | FS-600 | FS-1000 | FS-2000 | | |
|------------------------------|------------|----------------|---------------|------------|--|--|
| Started wind speed (m/s) | 1.3 m/s | 1.3 m/s | 1.5m/s | 1.5m/s | | |
| Cut-in wind speed (m/s) | 2.5 m/s | 2.5 m/s | 3m/s | 3m/s | | |
| Rated Wind speed (m/s) | 12 m/s | 11 m/s | 11m/s | 11m/s | | |
| Rated voltage(AC) | 12V-24V | 12V-48V | 24V-96V | 24V-96V | | |
| Rated power(W) | 200W | 600W | 1000w | 2000w | | |
| Max power(W) | 250W | 650W | 1050w | 2050w | | |
| Rotor Diameter of Blades(m) | 0.52m | 0.52m | 0.67m | 0.8m | | |
| Product assembly weight (Kg) | <19Kg | <23Kg | <38Kg | <89Kg | | |
| Blades height(m) | 1.05m | 1.3m | 1.5m | 2m | | |
| Safe wind speed (m/s) | | ≤40 | Om/s | | | |
| Blades quantity | | | 2 | | | |
| Blade material | | Glass | /Basalt | | | |
| Generator | Three phas | se permanent | magnet susper | sion motor | | |
| Control System | | Electro | omagnet | | | |
| Mount Height(m) | | 7~12 | m (9m) | | | |
| Generator protection grade | | IF | 254 | | | |
| Work environment temperature | -25~+45ºC | | | | | |
| Work environment humidity | ≤90% | | | | | |
| Altitude: | ≤4500m | | | | | |
| Overspeed protection | | Electroma | gnetic brake | | | |
| Overload protection | Electron | nagnetic brake | and the unloa | iding unit | | |

Vertical Wind Turbine





Grace

- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
- Muti colors for options

Flexible

- Wide power and voltage range
 Workable to do hybrid with solar panel

Reliable

- High efficiency on low wind speed with 2.5m/s
 Suitable for all applications
 Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
 Coreless PMG with low rpm

Application Scenario











Farm

RV





Street lamp, monitoring





| ltem | FV-50 | FV-100 | FV-200 | FV-500 | FV-1000 | FV-1500 | FV-2000 | | | |
|------------------------------|---------|---------|---------------|----------------|----------------|---------|---------|--|--|--|
| Started wind speed (m/s) | 1.3 m/s | 1.3 m/s | 1.3 m/s | 1.3 m/s | 1.3 m/s | 1.3 m/s | 1.3 m/s | | | |
| Cut-in wind speed (m/s) | 2.5 m/s | 2.5 m/s | 2.5 m/s | 2.5 m/s | 2.5 m/s | 2.5 m/s | 2.5 m/s | | | |
| Rated Wind speed (m/s) | 12 m/s | 12 m/s | 12 m/s | 12 m/s | 12 m/s | 12 m/s | 12 m/s | | | |
| Rated voltage(AC) | 12V-24V | 12V-24V | 12V-24V | 12V-48V | 12V-48V | 12V-48V | 12V-48V | | | |
| Rated power(W) | 50W | 100W | 200W | 500W | 1000W | 1500W | 2000W | | | |
| Max power(W) | 55W | 115W | 250W | 550W | 1050W | 1550W | 2050W | | | |
| Product assembly weight (Kg) | <12Kg | <15Kg | <24Kg | <25Kg | <30Kg | <75Kg | <95Kg | | | |
| Blades height(m) | 1m | 1.15m | 1.28m | 1.48m | 1.6m | 1.83m | 2.15m | | | |
| Safe wind speed (m/s) | | | | ≤40m/s | | | | | | |
| Blades quantity | | | | 2 | | | | | | |
| Blade material | | | | Glass/Basalt | | | | | | |
| Generator | | Thr | ee phase perm | nanent magnet | suspension m | otor | | | | |
| Control System | | | | Electromagne | t | | | | | |
| Mount Height(m) | | | | 7~12m (9m) | | | | | | |
| Generator protection grade | | | | IP54 | | | | | | |
| Work environment temperature | | | | -25~+45ºC | | | | | | |
| Work environment humidity | | ≲90% | | | | | | | | |
| Altitude: | | ≤4500m | | | | | | | | |
| Overspeed protection | | | Elec | tromagnetic b | orake | | | | | |
| Overload protection | | E | lectromagneti | c brake and th | e unloading ur | nit | | | | |



- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
 Muti colors for options

Flexible

- Wide power and voltage range
 Workable to do hybrid with solar panel

Reliable

- High efficiency on low wind speed with 2.5m/s
 Suitable for all applications
 Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
 Coreless PMG with low rpm

Application Scenario



Household



base station







Yacht



Street lamp, monitoring







| ltem | Tulip-600 | Tulip-1000 | Tulip-2000 | ROSE-600 | ROSE-1000 |
|------------------------------|-----------|---------------|-------------------------|--------------|-----------|
| Started wind speed (m/s) | 1.2m/s | 1.3m/s | 1.8m/s | 1.3m/s | 1.3m/s |
| Cut-in wind speed (m/s) | 2m/s | 3.5m/s | 3.5m/s | 2.5m/s | 2.5m/s |
| Rated Wind speed (m/s) | 11m/s | 12m/s | 12m/s | 12m/s | 12m/s |
| Rated voltage(AC) | 12V-24V | 12V-24V | 24V-48V | 12V-24V | 12V-24V |
| Rated power(W) | 600W | 1000W | 2000W | 600W | 1000W |
| Max power(W) | 650W | 1050W | 2050W | 650W | 1050W |
| Rotor Diameter of Blades(m) | 0.3m | 0.52m | 1m | 0.42m | 0.53m |
| Product assembly weight (Kg) | 20kg | 22kg | 120kg | 8kg | 25kg |
| Blades height(m) | 0.68m | 1.1m | 1.7m | 0.65m | 1.3m |
| Safe wind speed (m/s) | | | ≤40m/s | | |
| Blades quantity | | 2 | | | 3 |
| Blade material | | | Glass Fiber | | |
| Generator | | Three phase p | permanent magnet susp | ension motor | |
| Control System | | | Electromagnet | | |
| Mount Height(m) | | | 7~12m (9m) | | |
| Generator protection grade | | | IP54 | | |
| Work environment temperature | | | -25~+45ºC | | |
| Work environment humidity | | | ≤90% | | |
| Altitude: | | | ≤4500m | | |
| Overspeed protection | | | Electromagnetic brake | | |
| Overload protection | | Electromag | netic Brake And The Uni | oading Unit | |
| | | | | | |
| | | | | | |
| | | | | | |



- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
- Muti colors for options

Flexible

- Wide power and voltage range
- Workable to do hybrid with solar panel
 Compatible with lead-acid or lithium-ion batteries

Reliable

- High efficiency on low wind speed with 2.5m/s
 Suitable for all applications
 Long lifespan to 10 years and good quality ensure
- CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
- Coreless PMG with low rpm
- Curved blades decrease wind resistance

Application Scenario







Communication base station







Yacht



Street lamp, monitoring





| ltem | FH-400 | FH-600 | FH-800 | | |
|------------------------------|--------------|------------------------------|-------------|--|--|
| Started wind speed (m/s) | 1.3m/s | 1.3m/s | | | |
| Cut-in wind speed (m/s) | 2.5m/s | 2.5m/s | 2.5m/s | | |
| Rated Wind speed (m/s) | 12v/24v | 12v/24v/48v | 12v/24v/48v | | |
| Rated voltage(AC) | 400W | 600W | 800W | | |
| Rated power(W) | 450W | 850W | | | |
| Max power(W) | 10m/s | 10m/s | | | |
| Rotor Diameter of Blades(m) | 0.6m | 0.6m | 0.8m | | |
| Product assembly weight (Kg) | 21kg | 24kg | 26kg | | |
| Blades height(m) | 1m | 1m | 1.3m | | |
| Blade number | | 3 | | | |
| Blade material | | aluminium all | оу | | |
| Generator | Three phase | e permanent r nsion motor | | | |
| Control System | | Electromagne | et | | |
| Insulation | auto up-wind | | | | |
| Tower | Insulation | | | | |
| Working Temperature | | -25~+45ºC | | | |



Application Scenario

Grace

- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
- Muti colors for options

Flexible

- Wide power and voltage range
 Workable to do hybrid with solar panel
 Compatible with lead-acid or lithium-ion batteries

Reliable

- High efficiency on low wind speed with 2.5m/s
 Suitable for all applications
 Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
- Coreless PMG with low rpm
- Curved blades decrease wind resistance







Farm







Household Communication base station

RV

Street lamp, monitoring





| Item | FH-1000 | FH-2000 | FH-3000 | FH-5000 | FH-8000 | | | |
|------------------------------|--------------------------|---------------|-----------------|----------------|----------|--|--|--|
| Started wind speed (m/s) | 3m/s | 3m/s | 3m/s | 3m/s | 3m/s | | | |
| Cut-in wind speed (m/s) | 4m/s 4m/s 4m/s 4m/s 4m/s | | | | | | | |
| Rated Wind speed (m/s) | 11m/s | 11m/s | 11m/s | 11 m/ s | 11m/s | | | |
| Rated voltage(AC) | 48V | 48V-96V | 48V-220V | 96V-360V | 96V-360V | | | |
| Rated power(W) | 1000W | 2000W | 3000W | 5000W | 8000W | | | |
| Max power(W) | 1200W | 2200W | 3500W | 5500W | 8500W | | | |
| Rotor Diameter of Blades(m) | 1.4m | 1.8m | 2.0m | 2.6m | 3m | | | |
| Product assembly weight (Kg) | 60kg | 120kg | 190kg | 330kg | 360kg | | | |
| Blades height(m) | 2.0m | 2.8m | 3.2m | 4.2m | 4.5m | | | |
| Blades colors | | W | /hite/Multicol | or | | | | |
| Safe wind speed (m/s) | | | ≤55m/s | | | | | |
| Blades quantity | | 3 Bla | ides (Can Incre | ease) | | | | |
| Blade material | | Aviatio | on Aluminun | n Alloy | | | | |
| Generator | Thre | ee phase perm | anent magnet | suspension m | otor | | | |
| Control System | | E | lectromagne | et | | | | |
| Mount Height(m) | | | 6~20m (12m) | | | | | |
| Generator protection grade | | | IP54 | | | | | |
| Work environment temperature | | | -40~+80ºC | | | | | |
| Work environment humidity | ≤90% | | | | | | | |
| Altitude: | ≤4500m | | | | | | | |
| Overspeed protection | | Elect | romagnetic l | orake | | | | |
| Overload protection | EI | ectromagnetic | Brake And The | e Unloading U | nit | | | |



- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
 Muti colors for options

Flexible

- Wide power and voltage range
 Workable to do hybrid with solar panel
 Compatible with lead-acid or lithium-ion batteries

Reliable

- High efficiency on low wind speed with 2.5m/s
 Suitable for all applications
 Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
- Coreless PMG with low rpm
- Curved blades decrease wind resistance







Application Scenario

Communication base station







Yacht



Street lamp, monitoring





| ltem | FH-10K | FH-20K | FH-30K | FH-50K | | | |
|------------------------------|---------------------|-----------------------------|---------------|------------|--|--|--|
| Started wind speed (m/s) | 4m/s 4m/s 4m/s 4m/s | | | | | | |
| Cut-in wind speed (m/s) | 5m/s 5m/s 5m/s 5m | | | | | | |
| Rated Wind speed (m/s) | 12m/s | 12m/s | 12m/s | 12m/s | | | |
| Rated voltage(AC) | 220V-380V | 220V-380V 220V-380V 380V 38 | | | | | |
| Rated power(W) | 10KW | 20KW | 30KW | 50KW | | | |
| Max power(W) | 11KW | 22KW | 30.5KW | 55.5KW | | | |
| Rotor Diameter of Blades(m) | 4.0m | 5.0m | 5.0m | 6m | | | |
| Product assembly weight (Kg) | 950kg | 1560kg | 2000kg | 2800kg | | | |
| Blades height(m) | 6.0m | 7.0m | 10m | 15m | | | |
| Blades colors | White/Multicolor | | | | | | |
| Safe wind speed (m/s) | | ≤55 | m/s | | | | |
| Blades quantity | | 3 Blades (Ca | an Increase) | | | | |
| Blade material | | Aviation Alu | minum Alloy | | | | |
| Generator | Three phas | e permanent n | nagnet suspen | sion motor | | | |
| Control System | | Electro | magnet | | | | |
| Mount Height(m) | | 6~20m | (12m) | | | | |
| Generator protection grade | | IP | 54 | | | | |
| Work environment temperature | | -40~4 | -80ºC | | | | |
| Work environment humidity | ≤90% | | | | | | |
| Altitude: | ≤4500m | | | | | | |
| Overspeed protection | | Electromag | netic brake | | | | |
| Overload protection | Electrom | agnetic Brake | And The Unloa | ding Unit | | | |



- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
 Muti colors for options

Flexible

- Wide power and voltage range
- Workable to do hybrid with solar panel
 Compatible with lead-acid or lithium-ion batteries

Reliable

- High efficiency on low wind speed with 2.5m/s
 Suitable for all applications
 Long lifespan to 10 years and good quality ensure
- CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
- Coreless PMG with low rpm
- Curved blades decrease wind resistance







Application Scenario





Farm



RV



Street lamp, monitoring





| Item | Q1-400 | Q3-600 | Q3-800 | Q3-5K | Q5-1K | Q5-2K |
|------------------------------|---------|---------------|---------------|---------------|---------------|--------|
| Started Wind Speed | 1.3 m/s | 1.3 m/s | 1.3 m/s | 2m/s | 2m/s | 2 m/s |
| Cut-in Wind Speed | 2.5 m/s | 2.5 m/s | 3 m/s | 4m/s | 3 m/s | 4 m/s |
| Rated Wind Speed | 12 m/s | 12 m/s | 12 m/s | 12m/s | 12 m/s | 12 m/s |
| Rated Voltage(AC) | 12V-24V | 12V-24V | 12V-24V | 24V | 24V | 24V |
| Rated Power | 400W | 600W | 800W | 5KW | 1KW | 2KW |
| Max Power | 450W | 650W | 850W | 5.5KW | 1.5KW | 2.5KW |
| Rotor Diameter of Blades | 0.8m | 1.0m | 2m | 4.4m | 2m | 3.38m |
| Product Assembly Weight | 19kg | 26kg | 160kg | 710kg | 210kg | 370kg |
| Number of Blades | 3 | 3 | 3 | 3 | 3 | 3 |
| Blades Height | 0.8m | 1.0m | 2.3m | 4.5m | 2.3m | 3.5m |
| Safe Wind Speed | | | ≤40 | m/s | | |
| Blades Colors | | | Red/blu | e/ silver | | |
| Blade Material | | | Aluminu | ım alloy | | |
| Generator | | Three Phase P | ermanent Mag | net Suspensio | n Generator D |) |
| Control System | | | Electro | magnet | | |
| Mount Height | | | 2-3 | 0m | | |
| Generator Protection Grade | | | IP: | 54 | | |
| Work Environment Temperature | | | -40~4 | 80ºC | | |
| Work Environment Humidity | | | ≤9 | 0% | | |
| Altitude | | | ≤450 | 00m | | |
| Overspeed Protection | | | Electromag | netic Brake | | |
| Overload Protection | | Electrom | agnetic Brake | And The Unioa | ding Unit | |



- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
- Muti colors for options

Flexible

- Wide power and voltage range
 Workable to do hybrid with solar panel
- Compatible with lead-acid or lithium-ion batteries

Reliable

- High efficiency on low wind speed with 2.5m/s
- Suitable for all applications
 Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
 Coreless PMG with low rpm

Application Scenario







Communication base station







Yacht



monitoring







| ltem | FR-100 | FR-200 | FR-300 | FR-500 | | |
|------------------------------|------------|---------------|----------------|------------|--|--|
| Started Wind Speed | 2 m/s | 2m/s | 2 m/s | 2 m/s | | |
| Cut-in Wind Speed | 3 m/s | 3 m/s | 3 m/s | 4 m/s | | |
| Rated Wind Speed | 11 m/s | 11m/s | 11 m/s | 12 m/s | | |
| Rated Voltage(AC) | 12V-24V | 12V-24V | 12V-24V | 12V-24V | | |
| Rated Power | 100W | 200W | 300W | 500W | | |
| Max Power | 150W | 250W | 350W | 550W | | |
| Rotor Diameter of Blades | 0.84m | 0.84m | 0.84m | 0.84m | | |
| Product Assembly Weight | 14kg | 15Kg | 16kg | 18kg | | |
| Blades Height | 0.6m | 0.6m | 0.6m | 0.6m | | |
| Blades Colors | | White/G | reen/Red | | | |
| Safe Wind Speed | | ≤40 | m/s | | | |
| Number of Blades | | ! | 5 | | | |
| Blade Material | | Glass | Fiber | | | |
| Generator | Three Phas | e Permanent N | ∕lagnet Suspen | sion Motor | | |
| Control System | | Electro | magnet | | | |
| Mount Height | | 2~1 | l2m | | | |
| Generator Protection Grade | IP54 | | | | | |
| Work Environment Temperature | -40~+80ºC | | | | | |
| Work Environment Humidity | ≤90% | | | | | |
| Altitude | | ≤45 | 00m | | | |
| Overspeed Protection | | Electromag | netic Brake | | | |



HORIZONTAL AXIS

Utilizing the power of nature with science and technology

GENERATIONS ENERGY













SUN Series



Grace

- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
 Muti colors for options

Flexible

- Wide power and voltage range
 Workable to do hybrid with solar panel

Reliable

- High efficiency on low wind speed with 2.5m/s
 Suitable for all applications
 Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
 Coreless PMG with low rpm

Application Scenario







Communication base station





Yacht



Street lamp, monitoring







Horizontal Wind Turbine

| ltem | S2-400 | FZ-600 | SUN-800 | S3-1000 | SC-1000 | | | |
|-------------------------|---------|---|------------------|-----------------|---------|--|--|--|
| Rated Power | 400W | 600W | 800W | 1000W | 1000W | | | |
| Maximum Power | 410W | 610W | 850W | 1050W | 1250W | | | |
| Blade Length | 580mm | 550mm | 580mm | 370mm | 550mm | | | |
| Rated Voltage | 12-24V | 12-24V | 12-24V | 12-48V | 24-96V | | | |
| Start-up Wind Speed | 2m/s | 2m/s | 2m/s | 2m/s | 2m/s | | | |
| Rated Wind Speed | 13m/s | 13m/s | 13m/s | 13m/s | 12m/s | | | |
| Product Assembly Weight | 9.5kg | 9.5kg | 9.5kg | 9.5kg | 9.5kg | | | |
| Number of Blades | 3 | 5 | 6 | 8 | 6 | | | |
| Blades Material | | | Nylon Fiber | | | | | |
| Generator Type | Three I | Three Phase Permanent Magnet AC Synchronous Generator | | | | | | |
| Magnet Material | | NdFeB | | | | | | |
| Generator Case | | Ca | sting Aluminum | Alloy | | | | |
| Control System | | E | lectromagnetic, | /yaw | | | | |
| Overspeed Protection | | El | ectromagnetic l | brake | | | | |
| Working Temperature | | | -40~+80ºC | | | | | |
| Overload Protection | 1 | Electromagne | tic Brake And Th | ne Unloading Un | it | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

M Series





- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
 Muti colors for options

Flexible

- Wide power and voltage range
 Workable to do hybrid with solar panel

Reliable

- High efficiency on low wind speed with 2.5m/s
 Suitable for all applications
 Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
 Coreless PMG with low rpm

Application Scenario



Household



Communication

base station











Yacht

Street lamp, monitoring







Horizontal Wind Turbine

| Item | M3-1000 | M4-1500 | M5-2000 | FL-2500 | FL-3000 | | | | |
|-------------------------|---------|---|-----------------|----------------|---------|--|--|--|--|
| Rated Power | 1000W | 1500W | 2000W | 1500W | 2000W | | | | |
| Maximum Power | 1250W | 1550W | 2050W | 1650W | 2500W | | | | |
| Blades height | 0.81m | 0.9m | 1m | 1.4m | 1.6m | | | | |
| Rated Voltage | 12-24V | 12-24V | 12-24V | 12-48V | 24-96V | | | | |
| Start-up Wind Speed | 2m/s | 2m/s | 2m/s | 2m/s | 2m/s | | | | |
| Rated Wind Speed | 13m/s | 13m/s | 13m/s | 13m/s | 12m/s | | | | |
| Product Assembly Weight | 13kg | 25kg | 28kg | 45kg | 52kg | | | | |
| Number of Blades | | | 3 | | | | | | |
| Blades Material | | | Nylon Fiber | | | | | | |
| Generator Type | Three | Three Phase Permanent Magnet AC Synchronous Generator | | | | | | | |
| Magnet Material | | NdFeB | | | | | | | |
| Generator Case | | Cas | ting Aluminum A | lloy | | | | | |
| Control System | | Ele | ectromagnetic/y | aw | | | | | |
| Overspeed Protection | | Ele | ctromagnetic br | ake | | | | | |
| Working Temperature | | | -40~+80°C | | | | | | |
| Overload Protection | | Electromagneti | c Brake And The | Unloading Unit | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

FK Series



Grace

- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
 Muti colors for options

Flexible

- Wide power and voltage range
- Workable to do hybrid with solar panel
- Compatible with lead-acid or lithium-ion batteries

Reliable

- High efficiency on low wind speed with 2.5m/s
- Suitable for all applications
- Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
 Coreless PMG with low rpm
- Curved blades decrease wind resistance







Communication

base station

Application Scenario











Yacht

Street lamp, monitoring





Horizontal Wind Turbine

| ltem | FK-1000 | FK-2000 | FK-3000 | FK-5000 | FK-8000 | FK-10K | FK-15K | FK-20k | | | |
|-------------------------|---|----------|----------|----------|----------|----------|----------|----------|--|--|--|
| Rated Power | 1000W | 2000W | 3000W | 5000W | 8000W | 10KW | 15KW | 20KW | | | |
| Maximum Power | 1500W | 2500W | 3500W | 5500W | 8100W | 12KW | 16KW | 25KW | | | |
| Wheel Diameter | 2.8m | 3.2m | 3.9m | 4.8m | 5.4m | 5.6m | 6.25m | 8m | | | |
| Blade Length | 1.4m | 1.6m | 1.6m | 1.9m | 2.4m | 2.4m | 2.8m | 3.5m | | | |
| Rated Voltage | 48V-96V | 48V-220V | 48V-220V | 96V-380V | 96V-380V | 96V-380V | 96V-380V | 96V-380V | | | |
| Start-up Wind Speed | 3m/s | 3m/s | 4m/s | 4m/s | 4m/s | 4m/s | 4m/s | 4m/s | | | |
| Rated Wind Speed | 10m/s | 10m/s | 12m/s | 12m/s | 12m/s | 12m/s | 12m/s | 12m/s | | | |
| Product Assembly Weight | 52kg | 60kg | 102kg | 260kg | 350kg | 380kg | 582kg | 850kg | | | |
| Number of Blades | 3 | | | | | | | | | | |
| Blades Material | Aviation Aluminum Alloy | | | | | | | | | | |
| Generator Type | Three Phase Permanent Magnet AC Synchronous Generator | | | | | | | | | | |
| Magnet Material | NdFeB | | | | | | | | | | |
| Generator Case | Casting Aluminum Alloy | | | | | | | | | | |
| Control System | Electromagnet | | | | | | | | | | |
| Overspeed Protection | Electromagnetic brake | | | | | | | | | | |
| Working Temperature | -25~+65°C | | | | | | | | | | |
| Overload Protection | Electromagnetic Brake And The Unloading Unit | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

FD Series



Grace

- Fashion appearance, quite operation
 IP 54, smooth curve fiberglass blades
- Muti colors for options

Flexible

- · Wide power and voltage range
- Workable to do hybrid with solar panel
 Compatible with lead-acid or lithium-ion batteries

Reliable

- High efficiency on low wind speed with 2.5m/s
- Suitable for all applications
 Long lifespan to 10 years and good quality ensure
 CE certified with ISO

Advanced

- Sustainable energy producing
 Environmental protecting for whole world
- Coreless PMG with low rpm
- Curved blades decrease wind resistance













Household Communication base station

Application Scenario

Farm

Yacht

monitoring





Horizontal Wind Turbine

| Item | FD-30K | FD-50K | FD-80K | FD-100K | FK-150K | FK-200k | | | | |
|-------------------------|---|----------------|-----------|-----------|-----------|-----------|--|--|--|--|
| Rated Power | 30KW | 50KW | 80KW | 100KW | 150KW | 200KW | | | | |
| Maximum Power | 35KW | 55KW | 85KW | 125KW | 155KW | 225KW | | | | |
| Wheel Diameter | 10.1m | 15.5m | 18.6m | 21.6m | 23m | 28m | | | | |
| Rated Voltage | 220-600V | 96V-380V | 220V-600V | 220V-600V | 380V-600V | 380V-600V | | | | |
| Start-up Wind Speed | 4m/s | 4m/s | 4m/s | 4m/s | 4m/s | 4m/s | | | | |
| Rated Wind Speed | 12m/s | 15m/s | 15m/s | 15m/s | 15m/s | 15m/s | | | | |
| Product Assembly Weight | 2160kg | 2950kg | 4300kg | 4900kg | 5300kg | 6000kg | | | | |
| Number of Blades | 3 | | | | | | | | | |
| Blades Material | Aviation Aluminum Alloy | | | | | | | | | |
| Generator Type | Three Phase Permanent Magnet AC Synchronous Generator | | | | | | | | | |
| Magnet Material | NdFeB | | | | | | | | | |
| Generator Case | Casting Aluminum Alloy | | | | | | | | | |
| Control System | Electromagnet | | | | | | | | | |
| Overspeed Protection | Electromagnetic brake | | | | | | | | | |
| Working Temperature | -25~+65°C | | | | | | | | | |
| Overload Protection | | And The Unload | ding Unit | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

PMG GENERAOR EXHIBITION

GENERATOR



100W-600W PMG



1KW-20KW LOW RPM PMG



L STYLE 1KW-5KW PMG



M2 STYLE 300W- 600W PMG



500W-800W PMG



3KW-10KW PMG

GENRATOR CASE 01



GENRATOR CASE 02



ON GRID SYSTEM

ON GRID WIND SYSTEM







1KW-20KW LOW RPM PMG



10KW GRID CONTROLLER INVERTER



3KW-5KW CONTROLLER INVERTER



WIND INVETER

ON GRID SOLAR INVERTER









Wind Generator

Power unit

City Electric Power Grid

Power Generation System Switch City electric switch

Dump Load Resistor



OFF GRID SYSTEM OFF GRID WIND SYSTEM







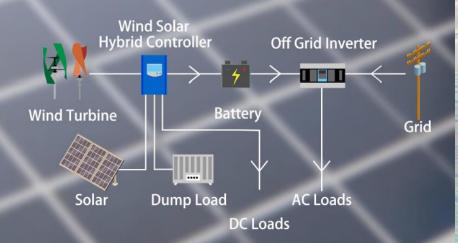


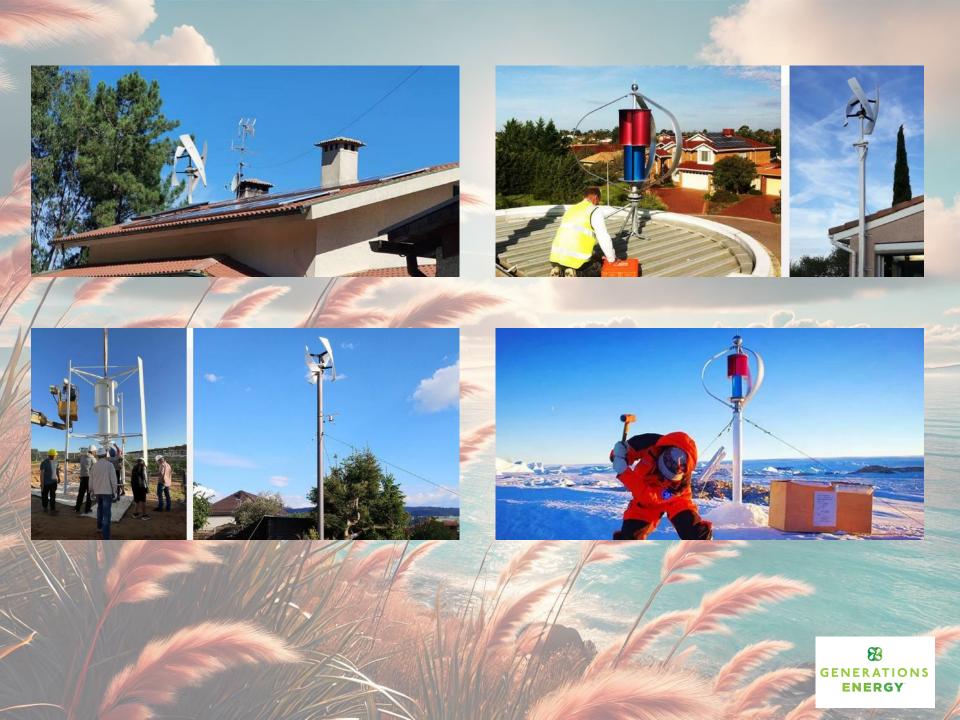
PWM 20KW-300KW

OFF GRID SOLAR INVERTER











Trusted New Zealand Partner:

EXECUTE ATIONS ENERGY